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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

IN RE: SCHROMEN, John P.)
) APPEAL NO. _____
SERIAL NO: 10/656,514)
)
FOR: DUAL DRIVE MATERIAL TURNING)
)
MACHINE AND METHOD)
) BRIEF ON APPEAL
FILED: September 5, 2003)
)
GROUP ART UNIT: 3671)

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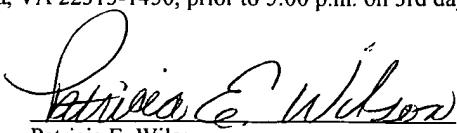

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I. INTRODUCTION

This is an appeal of the Final Rejection dated July 15, 2004, finally rejecting claims 1-10 and 14-22. The appealed claims 1-10 and 14-22 are set forth in an attached Appendix.

II. REAL PARTY OF INTEREST

The real party of interest in the present appeal is the assignee, Scat Engineering, Inc., 202 Locust, Hopkinton, Iowa 52237, by an assignment from the inventors recorded December 2, 2003, at Reel/Frame 014171/0276.

III. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

IV. STATUS OF CLAIMS

Claims 1-19 were originally submitted September 5, 2003. In an Amendment dated May 26, 2004, Appellant amended claims 1-3, 6-8, and 14, canceled claims 11-13, and added claims 20-22. The claims here appealed are claims 1-10 and 14-22 as set forth in an attached Appendix.

V. STATUS OF AMENDMENTS

No amendments were made in response to the final rejection dated July 15, 2004. A Notice of Appeal was timely filed on Octboer 28, 2004.

VI. CONCISE EXPLANATION OF THE INVENTION

A. Independent Claim 1

Claim 1 relates to an apparatus for turning material piled on the ground in a windrow 10 comprising a first track assembly 12 and a second track assembly 33 spaced apart from one another and having continuous tracks. (Specification p. 6, lines 4-10; Fig. 1). Each of the track assemblies 12 and 33 has elongated track axes spaced apart from one another and approximately parallel to one another, the track assemblies 12 and 33 engaging the ground and being adapted to move in a forward direction on the ground toward the material piled on the ground. (Spec. p. 6, lines 4-10; Fig. 1).

A lift assembly 16 is connected between the first and second track assemblies 12 and 33 and comprises an upper end, a lower end, and a belt 76 trained around the upper and lower ends. (Spec. p. 6, lines 11-12; Spec. p. 7, lines 1-9; Fig. 1 and 3). The lower end is positioned adjacent the ground with the upper end being positioned in spaced relation above, and rearwardly of the lower end whereby the belt 76 includes an upwardly presented front belt surface 122 extending upwardly from the lower to the upper end. (Spec. p. 7, lines 1-9; Fig. 3).

A power source 60 is connected to both of the first and second track assemblies 12 and 33 for independently driving the first and second track assemblies 12 and 33. (Spec. p. 6, lines 24-26; Fig. 4). The power source 60 is connected to at least one of the upper and lower ends for causing the at least one end to rotate and cause the front surface of the belt 122 to move continuously from the lower end toward the upper end and to cause the rear surface of the belt 124 to move continuously from the upper end toward the lower end. (Spec. p. 6, lines 24-26; Spec. p. 7, lines 1-9; Fig. 3). The belt 76 engages the material piled on the ground and carries the material upwardly on the front surface of the belt 122 and then drops

the material onto the ground as the belt 76 passes over the upper end. (Spec. p. 7, lines 1-16; Fig. 3).

B. Dependent Claim 2

Claim 2 depends from claim 1 and further requires a frame member 90 adjacent the upper end of the lift assembly 16. (Spec. p. 7, lines 22-26; Fig. 2). The frame member 90 is stationary with respect to the movement of the belt 76 of the lift assembly 16, and having a first group and second group of vanes 94 and 96 mounted thereon in spaced relation to one another adjacent the upper end for engaging and guiding the material as the belt 76 carries the material over the upper end and drops the material back onto the ground. (Spec. p. 7, lines 22-26; Fig. 2).

C. Dependent Claim 3

Claim 3 depends from claim 2 and further requires that the vanes 94 and 96 be independently adjustable to change independently the direction of the flat vane surfaces of the first and second groups of vanes 94 and 96 so as to direct and guide the material in first and second different directions as the material passes over the upper end of the lift assembly 16. (Spec. p. 7, lines 22-31 to p. 8, lines 1-11; Fig. 1 and 2).

D. Dependent Claim 5

Claim 5 depends from claim 1 and further requires a tightening apparatus that comprises a hydraulic cylinder 68 enclosed within a hydraulic cylinder protective housing 42 so as to protect the hydraulic cylinder 68 from coming in contact with the material. (Spec. p. 7, lines 1-9, Fig. 3).

E. Independent Claim 6

Claim 6 is an independent apparatus claim that describes a windrow 10 of material lying on the ground, the windrow having a width, a height, and a length. (Spec. p. 6, lines 1-

3; Fig. 1). A first track assembly 12 and a second track assembly 33 spaced apart from one another straddle the windrow 10. (Spec. p. 6, lines 3-8; Fig. 1). The first and second track assemblies 10 and 33 each having a continuous track, and engage the ground for moving the track assemblies in a forward direction. (Spec. p. 6, lines 3-10; Fig. 1).

A lift assembly 16 is movably connected to both the first and second tracks 12 and 33 and comprises an upper end, a lower end, and a belt 76 trained around the upper and lower ends. (Spec. p. 6, lines 11-12; Spec. p. 7, lines 1-9; Fig. 1 and 3). The lower end is positioned adjacent the ground and forwardly of the upper end for engaging the windrow 10 before the upper end. (Spec. p. 7, lines 1-9; Fig. 3). The upper end is positioned in spaced relation above and rearwardly from the lower end whereby the belt 76 includes a front surface 122 presented upwardly and extending upwardly from the lower end to the upper end, and a rear belt surface 124 presented downwardly and extending from the upper end to the lower end. (Spec. p. 7, lines 1-9; Fig. 3). The belt 76 is in contact with the material lying on the ground. (Spec. p. 7, lines 1-9; Fig. 3).

A power source 60 is connected to both of the first and second track assemblies 12 and 33 for independently driving the first and second track assemblies 12 and 33 to move the track assemblies 12 and 33 in a forward direction on the ground toward the windrow 10 of material. (Spec. p. 6, lines 24-26; Fig. 4). The power source 60 is connected to at least one of the upper and lower ends to cause the at least one end to rotate and cause the front face of the belt 122 to move continuously from the lower end toward the upper end and to cause the rear face of the belt 124 to move continuously from the upper end toward the lower end. (Spec. p. 6, lines 24-26; Spec. p. 7, lines 1-9; Fig. 3). The belt 76 engages the material piled on the ground and carries the material upwardly on the front surface of the belt 122 and then

drops the material back onto the ground as the belt 76 passes over the upper end. (Spec. p. 7, lines 1-16; Fig. 3).

F. Dependent Claim 7

Claim 7 depends from claim 6, and further requires that the frame member 90 be stationary with respect to the belt 76, the frame member 90 being adjacent the upper end and having a plurality of vanes 94 and 96 mounted thereon in spaced relation to one another adjacent the upper end for engaging and guiding the material as the belt 76 carries the material over the upper end and drops the material back onto the ground. (Spec. p. 7, lines 10-26; Fig. 2).

G. Dependent Claim 8

Claim 8 depends from claim 7, and further requires that the plurality of vanes 94 and 96 each have a flat vane surface, the plurality of vanes including first and second groups of vanes 94 and 96 that are independently adjustable to change the direction of the flat vane surfaces so as to direct and guide the material in first and second directions respectively. (Spec. p. 7, lines 22-31 to p. 8, lines 1-11; Fig. 1 and 2).

H. Independent Claim 14

Claim 14 is an independent method claim, and is directed to a method for turning a quantity of material contained within a first elongated pit 154. (Spec. p. 8, lines 27-31 to p. 9, lines 1-19; Fig. 7). The method includes positioning a belt assembly 28 within the first elongated pit 154, the belt assembly 28 having a lower end engaging the material within the first elongated pit 154, an upper end above the lower end, and a continuous belt 76 trained around the lower and upper ends. (Spec. p. 8, lines 27-31 to p. 9, lines 1-19; Fig. 7).

The continuous belt 76 is moved so that it progresses from the lower end to the upper end on an upwardly presented front face of the belt 122, and moves from the upper end to the

lower end on a downwardly presented back face of the belt 124. (Spec. p. 7, lines 1-9; Fig. 3). The material is lifted on the front face of the belt assembly 122 as the belt assembly 76 moves from the lower end of the belt assembly 76 to the upper end of the belt assembly 76. The material is then deposited back in the first pit 154 after the belt assembly 76 as carried the material from the lower end of the belt assembly 76 to the upper end. (Spec. p. 7, lines 1-9; Fig. 3).

I. Independent Claim 20

Claim 20 is an independent method claim, and is directed to a method for turning material piled on the ground in a windrow 10 involving taking an apparatus comprising a first track assembly 12 and a second track assembly 14 spaced apart from one another and each having a continuous track trained around spaced apart forward 24 and rear wheels 26. (Spec. p. 6, lines 1-8; Fig. 1). The track assemblies 12 and 14 engage the ground and are adapted to move in a forward direction on the ground toward the material piled on the ground. (Spec. p. 6, lines 1-8; Fig. 1).

The apparatus further comprises a lift assembly 16 positioned between and connected to the first and second track assemblies 12 and 14 and comprising an upper end, a lower end, and a belt 76 trained around the upper and lower ends, the lower end being positioned adjacent the ground and the upper end being positioned in spaced relation above and rearwardly of the lower end whereby the belt 76 includes an upwardly presented front belt surface 122 extending upwardly from the lower end to the upper end, and a downwardly presented rear belt surface 124 extending from the upper end to the lower end. (Spec. p. 7, lines 1-9; Fig. 3). The first and second track assemblies 12 and 14 are powered independently of one another so as to steer the apparatus in a forward direction toward the windrow 10. (Spec. p. 9, lines 5-14; Fig. 8).

The upwardly presented front belt surface 122 from the lower end of the lift assembly 16 is moved to the upper end of the lift assembly 16 and the downwardly present rear belt surface 124 from the upper end of the lift assembly 16 to the lower end of the lift assembly 16. (Spec. p. 7, lines 1-9; Fig. 3). The first and second track assemblies 12 and 14 are steered so that they straddle the windrow 10 and the lower end of the lift assembly 16 engages the windrow 10 and causes the material in the windrow 10 to be carried by the upwardly presented front belt surface 122 to the upper end of the lift assembly 16. (Spec. p. 7, lines 1-9; Fig. 3). The material of the windrow 10 is dropped from the top end of the lift assembly 16 back onto the ground. (Spec. p. 7, lines 1-9; Fig. 3).

J. Dependent Claim 21

Claim 21 depends from claim 20 and further requires using a first group of vanes 94 to deflect a first portion of the material being dropped from the top lift assembly 16 in a first direction and using a second group of vanes 96 to deflect a second portion of the material being dropped from the top end of the lift assembly 16 in a second direction. (Spec. p. 7, lines 22-26; Fig. 1).

K. Dependent Claim 22

Claim 22 depends from claim 20 and further requires that the belt 76 is trained around first and second rotating members 62, a tube assembly having a first tube member 66 connected to the first rotating member and being telescopically mounted with respect to a second tube member 42 connected to the second rotating member 62. (Spec. p. 6, lines 20-24; Fig. 4). The method further comprising using a longitudinally extensible piston and cylinder 54 located inside the first and second tube members 42 to cause the first tube member 42 to telescope and expand longitudinally with respect to the second tube member

42 so as to increase the tension of the belt 76 trained around the first and second rotating members 62. (Spec. p. 6, lines 20-27; Fig. 4).

VII. IDENTIFICATION OF MEANS PLUS FUNCTION FOR EACH CLAIM FOR WHICH PATENTABILITY IS SEPARATELY ARGUED

No means plus function are identified for any of the claims for which patentability is separately argued.

VIII. CONCISE STATEMENT LISTING GROUND OF REJECTION PRESENTED FOR REVIEW

A. Claims 1-3, 6-8, and 14-22 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Wagner, Jr. (U.S. Patent No. 3,858,814).

B. Claims 4-5 and 9-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wagner, Jr. (U.S. Patent No. 3,858,814) in view of Merten et al. (U.S. Patent No. 5,641,058).

IX. ARGUMENT

A. Anticipation Rejection - Claims 1-3, 6-8, and 14-22

Claims 1-3, 6-8, and 14-22 were rejected under 35 U.S.C. § 102(b) as being anticipated by Wagner, Jr. (U.S. Patent No. 3,858,814).

1. The Law of Anticipation

A rejection for anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention. Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984). Further, the reference must generally place the needed subject matter supporting the anticipation rejection in the public domain before the date of invention. In re Zenitz, 333

F.2d 924, 142 USPQ 158, 160 (C.C.P.A. 1964). It follows from this second element that a reference does not legally anticipate the claimed subject matter if it is found not to be sufficiently enabling, in other words, if it does not place the subject matter of the claims within the possession of the public. In re Wilder, 429 F.2d 447, 166 USPQ 545 (C.C.P.A. 1970).

2. Appellant's Claims are Not Anticipated by Wagner

a. Claim 1

Independent claim 1 requires a first track assembly and a second track assembly spaced apart from one another and having continuous tracks, said track assemblies "engaging the ground" and "being adapted to move in a forward direction on the ground toward the material piled on the ground." The Examiner asserts that Wagner discloses first and second track assemblies/sprockets, citing Col. 2, lines 25-26 and reference numerals 22 and 24 of the Wagner patent in support. (7/15/04 Office Action, p. 1).

As can be readily appreciated, Wagner does not disclose first and second track assemblies 21 and 38 that engage the ground, as required by claim 1. As described in Wagner's drawings and description, the sprockets 22 and 24 do not meet the ground. Instead, the sprockets serve to drive a set of endless chains 26 and 28, which in turn support a plurality of identical paddles or flight assemblies 30. (Col. 2, lines 23-30). These flight assemblies are adapted to lift, turn, mix, and aerate the waste material. (Col. 1, lines 12-16). Thus, it is the flight assemblies 30, not the sprockets 22 and 24, which meet the ground.

Further, the Wagner sprockets are not adapted to move in a forward direction on the ground toward the material piled on the ground, as required by claim 1. In this regard, claim 1 notes that the continuous belt on the belt assembly progresses from the lower end to the upper end on an upwardly presented front face of the belt, and moves from the upper end to

the lower end on a downwardly presented back face of the belt, thus also requiring Appellant's belt assembly to move in a forward direction towards the material on the ground.

Wagner's elevating device is adapted so that the sprockets 22 and 24 and chains that support the flight assemblies 30 drive the flight assemblies "upwardly or in a counterclockwise direction." (Col. 2, lines 30-33). Thus, the Wagner sprockets move in a backward, not forward direction. Wagner is therefore also not anticipating in this respect.

In addition, independent claim 1 requires the belt trained around the upper and lower ends of the lift assembly that includes an "upwardly presented front belt surface extending upwardly from the upper end to the lower end" and a rear belt surface that moves "continuously from the upper end to the lower end." Wagner also fails to disclose such upwardly and rearwardly presented belt surfaces that are presented in such a configuration with respect to the lift assembly.

Furthermore, claim 1 provides that the apparatus "carry the material upwardly on the front surface of the belt," then drop the material back, or behind the device, onto the ground as the belt passes over the upper end. In contrast, the action of the Wagner device is to "lift the material and move it to the right of the machine and at the same time turn, mix, and aerate the material." (Col. 1, lines 15-17)(Emphasis supplied). Wagner therefore also does not anticipate this feature of claim 1.

Claim 1 is also not rendered obvious by Wagner. There is no teaching or suggestion in Wagner to alter the configuration of its composter elevating device to provide track assemblies that engage the ground and move in a direction directly opposite to that taught in its disclosure. There is also no teaching in Wagner to provide an apparatus to carry waste material upwardly on the front surface of a belt, then drop the material behind, directly contrary to its teachings of lifting and moving the material to the right of the machine.

Furthermore, there is no teaching or suggestion in Wagner to modify its device so as to include an "upwardly presented front belt surface extending upwardly from the upper end to the lower end" and a rear belt surface that moves "continuously from the upper end to the lower end."

b. Claim 2

The Examiner rejected claim 2 as being anticipated by Wagner on the basis that Wagner discloses a frame in column 2, line 15. (7/15/04 Office Action, p. 3).

In addition to the elements of claim 1, claim 2 requires that the frame member be stationary with respect to the movement of the belt of the lift assembly, and that the frame member further include first and second groups of vanes mounted thereon. Since Wagner does not disclose vanes which are mounted in a position stationary with respect to the moving belt, claim 2 is not anticipated by Wagner.

Claim 2 is also not rendered obvious by Wagner. There is no teaching or suggestion in Wagner to include a frame member in its device that is stationary with respect to the movement of the belt of the left assembly, or to include a frame member that includes first and second groups of vanes mounted thereon.

c. Claim 3

The Examiner rejected claim 3 as being anticipated by Wagner on the basis that Wagner discloses vanes and paddles (reference numeral 36) that are independently adjustable (Fig. 3; col. 3, lines 15-17). (7/15/04 Office Action, p. 3).

In addition to the elements of claim 2, claim 3 requires that the first and second groups of vanes each be independently adjustable to independently change the direction of the flat vane surfaces of the first and second group of vanes. There is no disclosure in Wagner that its paddles 36 are independently adjustable to change the direction of the flat

vane surfaces. Instead, the portion of Wagner cited by the Examiner states that the teeth on the flight assemblies 30 can be modified "by increasing or decreasing or staggering the teeth so as to obtain the most effective shredding of the waste material." (Col. 3, lines 14-17). The staggering of the teeth has nothing to do with adjusting the orientation of the vanes or paddles. Thus, claim 3 is also not anticipated by Wagner.

Claim 3 is also not rendered obvious by Wagner. There is no teaching or suggestion in Wagner to modify its composter device to include independently adjustable vanes capable of changing the direction of the flat vane surfaces of the first and second group of vanes. In fact, Wagner teaches away from such a feature since Wagner notes that its flight assemblies 30 are "adapted to be driven upwardly or in a counterclockwise direction for shredding material as the composter vehicle is driven into a pile of refuse." (Col. 2, lines 31-34). Thus, the Wagner flight assemblies would not work for their intended purpose of shredding the waste material if they were oriented in a non-upward position.

d. Claim 6

As with claim 1, independent claim 6 requires a first track assembly and a second track assembly spaced apart from one another and having continuous tracks, said track assemblies "engaging the ground" and "being adapted to move in a forward direction on the ground toward the material piled on the ground." As noted above, Wagner does not disclose track assemblies that engage the ground, or that move in a forward direction towards material piled on the ground.

Claim 6 further provides that the first and second track assemblies "be spaced apart from one another and straddling the windrow." Since the Wagner sprockets do not engage the ground, they also do not straddle the windrow as required by claim 6.

Claim 6 also requires the belt trained around the upper and lower ends of the lift assembly include "a front surface presented upwardly and extending upwardly from the lower end to the upper end, and a rear belt surface presented downwardly and extending from the upper end to the lower end." Wagner also fails to disclose such upwardly and rearwardly presented belt surfaces that are presented in such a configuration with respect to the lift assembly.

Furthermore, as with claim 1, claim 6 provides that the apparatus "carry the material upwardly on the front surface of the belt," then drop the material back, or behind the device, onto the ground as the belt passes over the upper end. In contrast, the action of the Wagner device is to "lift the material and move it to the right of the machine and at the same time turn, mix, and aerate the material." (Col. 1, lines 15-17)(Emphasis supplied). Wagner therefore also does not anticipate this feature of claim 6.

Claim 6 is also not rendered obvious by Wagner. There is no teaching or suggestion in Wagner to alter the configuration of its composter elevating device to provide track assemblies that engage the ground, straddle the windrow, and move in a direction directly opposite to that taught in its disclosure. There is also no teaching in Wagner to provide an apparatus to carry waste material upwardly on the front surface of a belt, then drop the material behind, directly contrary to its teachings of lifting and moving the material to the right of the machine. Furthermore, there is no teaching or suggestion in Wagner to modify its device so as to include a belt with "a front surface presented upwardly and extending upwardly from the lower end to the upper end, and a rear belt surface presented downwardly and extending from the upper end to the lower end."

e. Claim 7

The Examiner also rejected claim 7 as being anticipated by Wagner. In addition to the elements of claim 6, claim 7 requires the presence of a plurality of vanes mounted on the frame member that is stationary with respect to the belt for engaging and guiding the material as the belt carries the material over the upper end and drops the material back onto the ground.

Again, Wagner does not teach the presence of a plurality of vanes that are stationary with respect to the frame on which they are mounted. Wagner further does not provide vanes or paddles that guide the waste material as it is carried over the upper end of the composter and back or behind the composter onto the ground below. Thus, claim 7 is not anticipated by Wagner.

Claim 7 is also not obvious in view of Wagner. There is no teaching or suggestion in Wagner to modify its composting device to provide a plurality of vanes that are stationary with respect to the frame on which they are mounted, nor does it teach modification of its device to provide vanes to guide the waste material behind the composter. In fact, with its teachings of guiding the waste material the right of the machine, Wagner actually teaches away from Appellant's claimed apparatus.

f. Claim 8

Claim 8 was rejected as being anticipated by Wagner. In addition to the elements of claims 7 and 6 from which claim 7 depends, claim 8 requires that the plurality of vanes be independently adjustable to change the direction of the flat vane surfaces so as to direct and guide the material in first and second directions respectively.

There is no disclosure in Wagner that its paddles 36 are independently adjustable to change the direction of the flat vane surfaces. It therefore also follows that Wagner does not

disclose independently adjustable vanes to change the direction of the flat vane surfaces so as to direct and guide the waste material in first and second directions. Hence, claim 8 is not anticipated by Wagner.

Claim 8 is also not rendered obvious by Wagner. There is no teaching or suggestion in Wagner to include independently adjustable paddles in its composter to guide the waste material in first and second directions. Instead, as already noted above, Wagner teaches away from such an apparatus since Wagner notes that its flight assemblies 30 are "adapted to be driven upwardly or in a counterclockwise direction for shredding material as the composter vehicle is driven into a pile of refuse." (Col. 2, lines 31-34). Thus, the Wagner flight assemblies would not work for their intended purpose of shredding the waste material if they were oriented in a non-upward position.

g. Claim 14

Independent claim 14 is a method claims that requires positioning of a belt assembly within an elongated pit, whereby the belt assembly engages the material within the pit. As noted above with respect to claims 1 and 6, Wagner does not disclose a belt assembly that engages the ground.

Claim 14 also provides that the material is lifted "on the front face of the belt assembly as the belt assembly moves from the lower end of the belt assembly to the upper end of the belt assembly." The material is then deposited back or behind the belt assembly after the belt assembly "has carried the material from the lower end of the belt assembly to the upper end." Wagner does not provide that waste material is lifted onto the front face of a belt assembly. Instead, as already noted above, the Wagner material is lifted and moved to the right of the machine. Wagner therefore does not anticipate claim 14.

Claim 14 is also not rendered obvious by Wagner. There is no teaching or suggestion in Wagner to provide track assemblies that engage the ground. There is also no teaching in Wagner to provide an apparatus to carry waste material upwardly on the front surface of a belt, then drop the material behind, directly contrary to its teachings of lifting and moving the material to the right of the machine.

h. Claim 20

Independent claim 20 is a method claims that requires positioning of first and second track assemblies within an elongated pit, whereby the assemblies engage the ground and are "adapted to move in a forward direction on the ground toward the material piled on the ground." As already noted above, Wagner does not disclose first and second track assemblies that engage the ground. Wagner further does not disclose assemblies that are adapted to move in a forward direction toward the material piled on the ground. Instead, the Wagner assembly moves in a counterclockwise, or reverse direction with respect to the waste material.

Claim 20 also provides that the material is moved on the "upwardly presented front belt surface from the lower end of the lift assembly to the upper end of the lift assembly and the downwardly present rear belt surface from the upper end of the lift assembly to the lower end of the lower assembly." The material is then "dropped from the top end of the lift assembly back onto the ground." Wagner does not provide that waste material is lifted onto the front face of a belt assembly, then dropped behind. Instead, as already noted above, the Wagner material is lifted and moved to the right of the machine.

Moreover, claim 20 requires that the first and second track assemblies are powered "independently of one another so as to steer the apparatus in a forward direction toward the windrow." Wagner does not teach powering first and assemblies independently of one

another so as to steer the apparatus in a forward direction toward the windrow. Accordingly, Wagner does not anticipate claim 20.

Claim 20 is also not rendered obvious by Wagner. There is no teaching or suggestion in Wagner to alter the configuration of its composter elevating device to provide track assemblies that engage the ground and move in a direction directly opposite to that taught in its disclosure. There is also no teaching in Wagner to provide an apparatus to carry waste material upwardly on the front surface of a belt, then drop the material behind, directly contrary to its teachings of lifting and moving the material to the right of the machine.

Furthermore, there is no teaching or suggestion in Wagner to modify its device to provide first and second track assemblies that are powered "independently of one another so as to steer the apparatus in a forward direction toward the windrow."

i. Claim 21

Claim 21 was rejected as being anticipated by Wagner. The Examiner argues that in view of the structure disclosed/taught by Wagner, "the method of operating/using the device is inherent since it is the normal and logical manner in which the device is used." (7/15/04 Office Action, p. 3).

In addition to the elements of claim 20, claim 21 further requires that the use of a first group of vanes to deflect a first portion of the material being dropped from the top lift assembly in a first direction and the use of a second group of vanes to deflect a second portion of the material being dropped from the top end of the lift assembly in a second direction.

There is no disclosure in Wagner of a first group of vanes or paddles that may be used to deflect a first portion of the material being dropped from a top lift assembly in a first direction, nor does it disclose a second group of vanes or paddles that may be used to deflect

a second portion of the material being dropped from the top end of a lift assembly in a second direction. Thus, claim 21 is not anticipated by Wagner.

It is not understood how the Examiner can state that the method of claim 21 is "inherent" in Wagner "since it is the normal and logical manner in which the device is used." The method of claim 21 cannot be "inherent" in Wagner since the structure described in claim 21 does not exist, inherently or otherwise, in Wagner.

Claim 21 is also not rendered obvious by Wagner. There is no teaching or suggestion in Wagner of first and second group of vanes used to deflect portions of material being dropped from the top lift since Wagner does not drop its waste material, but instead moves it to the right of the composter elevating device.

j. Claim 22

Claim 22 was rejected as being anticipated by Wagner. The Examiner argues that in view of the structure disclosed/taught by Wagner, "the method of operating/using the device is inherent since it is the normal and logical manner in which the device is used." (7/15/04 Office Action, p. 3).

In addition to the elements of claim 20, claim 22 further requires that a belt that is trained around first and second rotating members, and a tube assembly having a first tube member connected to the first rotating member and being telescopically mounted with respect to a second tube member connected to the second rotating member. The method of claim 22 further requires the use of a longitudinally extendible piston and cylinder located inside the first and second tube members to cause the first tube member to telescope and expand longitudinally with respect to the second tube member so as to increase the tension of the belt trained around the first and second rotating members.

Wagner does not disclose a belt trained around first and second rotating members, nor a tube assembly having a first tube member connected to the first rotating member and being telescopically mounted with respect to a second tube member connected to a second rotating member. Wagner also does not disclose the use of a longitudinally extendible piston and cylinder located inside the first and second tube members. Thus, Wagner does not anticipate claim 22. Again, it is not understood how the Examiner can state that the method of claim 22 is "inherent" in Wagner since the structure defined in claim 22 does not exist in Wagner.

Claim 22 is also not rendered obvious by Wagner. Wagner provides no teaching or suggestion of a belt trained around rotating members, nor a tube assembly telescopically mounted with respect to a second tube member connected to a second rotating member. Wagner likewise provides no teaching or suggestion of a longitudinally extendible piston and cylinder located inside the first and second tube members.

3. Conclusion as to Anticipation

As shown above, Wagner fails to disclose the required features of claims 1-3, 6-8, and 14-22. As such, Wagner does not anticipate, and the Examiner's rejection should accordingly be reversed.

B. **Obviousness Rejection - Claims 3-5 and 9-10**

Claims 3-5 and 9-10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Wagner, Jr. (U.S. Patent No. 3,858,814) in view of Merten et al. (U.S. Patent No. 5,641,056).

1. The Law of Obviousness

The PTO bears the burden of establishing a case of *prima facie* obviousness. In re Fine, 837 F.2d 1071, 1074 (Fed. Cir. 1988). The critical inquiry for obviousness is whether "there is something in the prior art as a whole to suggest the desirability, and thus the

obviousness, of making the combination." Fromson v. Advance Offset Plate, Inc., 755 F.2d 1549, 1558 (Fed. Cir. 1985). In other words, obviousness "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." In re Fine, 837 F.2d 1071, 1075 (Fed. Cir. 1988), quoting ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577 (Fed. Cir. 1984). This suggestion cannot stem from the applicant's own disclosure, however. In re Ehrreich, 590 F.2d 902 (CCPA 1979).

2. The Examiner has Failed to Establish a Prima Facie Case of Obviousness

The Examiner has rejected claims 4-5 and 9-10 under 35 U.S.C. § 103(a) as being unpatentable over Wagner, Jr. (U.S. Pat. No. 3,858,814) in view of Merten et al. (U.S. Pat. No. 5,641,058). In this respect, the Examiner argues that Wagner "discloses the claimed device except for showing a hydraulic belt/chain tightener." (7/15/04 Office Action, p. 4). The Examiner then uses the Merten reference for the alleged teaching that it is known in the art to provide a hydraulic tightener for endless belts in the form of chains or the like. (7/15/04 Office Action, p. 4). The Examiner then concludes that, "[i]t would have been obvious to one having ordinary skill in the art to provide a hydraulic tightener for endless belts in the form of chains or the like." (7/15/04 Office Action, p. 4).

The Examiner has failed to establish a teaching or suggestion in the art of record, even in combination, to modify their teachings to make a composting apparatus having Appellants' claimed features. Thus, the Examiner has failed to establish a prima facie case of obviousness.

Claims 4-5 and 9-10 ultimately depend from claims 1 and 6, respectively, and therefore by definition also include all of the elements of these claims. As already argued

extensively above, the primary reference Wagner does not teach the required elements of claims 1 and 6. Thus, contrary to the Examiner's assertion, Wagner does not disclose the claimed device of claims 4-5 and 9-10 with the exception of a hydraulic belt/chain tightener.

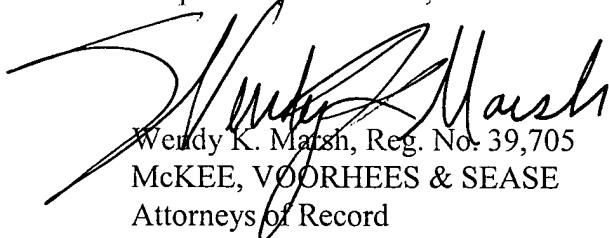
The mere addition of the alleged teaching in the Merten reference of a hydraulic tightener for endless belts does not provide the necessary teachings missing from Wagner. Even in combination, the cited references do not teach or suggest the invention of claims 4-5 and 9-10. Claims 4-5 and 9-10 are therefore not obvious over Wagner, Jr. in view of Merten et al. The Examiner's rejection of these claims should therefore be reversed.

X. CONCLUSION

For the above-stated reasons, it is submitted that the claims are in a condition for allowability. The decision of the Examiner, therefore, should be reversed and the case allowed.

Enclosed herein please find the appeal brief in triplicate and required fee of \$170.00. If this amount is not correct, please consider this a request to debit or credit Deposit Account No. 26-0084 accordingly.

Respectfully submitted,



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APPENDIX

1. Apparatus for turning material piled on the ground in a windrow comprising:
a first track assembly and a second track assembly spaced apart from one another and having continuous tracks, each having elongated track axes spaced apart from one another and approximately parallel to one another, the track assemblies engaging the ground and being adapted to move in a forward direction on the ground toward the material piled on the ground;
a lift assembly connected between the first and second track assemblies and comprising an upper end, a lower end, and a belt trained around the upper and lower ends; the lower end being positioned adjacent the ground and the upper end being positioned in spaced relation above, and rearwardly of the lower end whereby the belt includes an upwardly presented front belt surface extending upwardly from the upper end to the lower end;
a power source connected to both of the first and second track assemblies for independently driving the first and second track assemblies; the power source being connected to at least one of the upper and lower ends for causing the at least one end to rotate and cause the front surface of the belt to move continuously from the lower end toward the upper end and to cause the rear surface of the belt to move continuously from the upper end toward the lower end, whereby the belt will engage the material piled on the ground and carry the material upwardly on the front surface of the belt and then drop the material back onto the ground as the belt passes over the upper end.

2. The apparatus of claim 1 and further comprising a frame member adjacent the upper end of the lift assembly, the frame member being stationary with respect to the movement of the belt of the lift assembly, and having a first group and a second group of vanes mounted thereon in spaced relation to one another adjacent the upper end for engaging and guiding the material as the belt carries the material over the upper end and drops the material back onto the ground.
3. The apparatus of claim 2 wherein each of the vanes in the first and second groups of vanes have a flat vane surface, the first and second groups of vanes each being independently adjustable to change independently the direction of the flat vane surfaces of the first and second groups of vanes so as to direct and guide the material in first and second different directions as the material passes over the upper end of the lift assembly.
4. The apparatus of claim 1 wherein the upper end includes at least one upper sprocket and the lower end includes at least one lower sprocket, the belt being trained around the upper and lower sprockets, a belt tightening apparatus extending between the upper and lower sprockets and being longitudinally extensible to expand the distance between the upper and lower sprockets and thereby tighten the belt trained around the upper and lower sprockets.
5. The apparatus of claim 4 wherein the belt tightening apparatus comprises a hydraulic cylinder enclosed within a hydraulic cylinder protective housing so as to protect the hydraulic cylinder from coming in contact with the material.

6. In combination:

a windrow of material lying on the ground, the windrow having a width, a height, and a length;

a first track assembly and a second track assembly spaced apart from one another and straddling the windrow, the first and second track assemblies each having a continuous track, engaging the ground for moving the track assemblies in a forward direction;

a lift assembly movably connected to both the first and second tracks and comprising an upper end, a lower end, and a belt trained around the upper and lower ends; the lower end being positioned adjacent the ground and forwardly of the upper end for engaging the windrow before the upper end, the upper end being positioned in spaced relation above and rearwardly from the lower end whereby the belt includes a front surface presented upwardly and extending upwardly from the lower end to the upper end, and a rear belt surface presented downwardly and extending from the upper end to the lower end;

the belt being in contact with the material lying on the ground;

a power source connected to both of the first and second track assemblies for independently driving the first and second track assemblies to move the track assemblies in a forward direction on the ground toward the windrow of material;

the power source being connected to at least one of the upper and lower ends for causing the at least one end to rotate and cause the front face of the belt to move continuously from the lower end toward the upper end and to cause the rear face of the belt to move continuously from the upper end toward the lower end, whereby the belt will engage the material piled on the ground and carry the material upwardly on the front surface

of the belt and then drop the material back onto the ground as the belt passes over the upper end.

7. The apparatus of claim 6 and further comprising a frame member that is stationary with respect to the belt, the frame member being adjacent the upper end and having a plurality of vanes mounted thereon in spaced relation to one another adjacent the upper end for engaging and guiding the material as the belt carries the material over the upper end and drops the material back onto the ground.
8. The apparatus of claim 7 wherein the plurality of vanes each having a flat vane surface, the plurality of vanes including first and second groups of vanes that are independently adjustable to change the direction of the flat vane surfaces so as to direct and guide the material in first and second directions respectively.
9. The apparatus of claim 6 wherein the upper end includes at least one upper sprocket and the lower end includes at least one lower sprocket, the belt being trained around the upper and lower sprockets, a belt tightening apparatus extending between the upper and lower sprockets and being longitudinally extensible to expand the distance between the upper and lower sprockets and thereby tighten the belt trained around the upper and lower sprockets.
10. The apparatus of claim 9 wherein the belt tightening apparatus comprises a hydraulic cylinder enclosed within a hydraulic cylinder protective housing so as to protect the hydraulic cylinder from coming in contact with the material.

14. A method for turning a quantity of material contained within a first elongated pit comprising:

positioning a belt assembly within the first elongated pit, the belt assembly having a lower end engaging the material within the first elongated pit, an upper end above the lower end, and a continuous belt trained around the lower and upper ends;

moving the continuous belt so that it progresses from the lower end to the upper end on an upwardly presented front face of the belt, and moves from the upper end to the lower end on a downwardly presented back face of the belt;

lifting the material on the front face of the belt assembly as the belt assembly moves from the lower end of the belt assembly to the upper end of the belt assembly;

depositing the material back in the first pit after the belt assembly has carried the material from the lower end of the belt assembly to the upper end.

15. The method of claim 14 and further comprising moving the belt assembly along the length of the first pit so as to engage and lift all of the material within the first pit.

16. The method of claim 15 and further comprising mounting the belt assembly on an elongated channel mounted above the first pit and extending in a direction parallel to the pit, the step of moving the belt assembly comprising moving the belt assembly along the length of the channel.

17. The method of claim 15 wherein a second elongated pit has a quantity of material therein, the method further comprising moving the belt assembly into the second pit after

engaging and lifting all the material in the first pit, engaging the material in the second pit with the lower end of the belt assembly, lifting the material in the second pit upwardly, and depositing the material back into the second pit after the material has reached the upper end of the belt assembly.

18. The method of claim 17 wherein the first and second are side by side, and the method comprises moving the belt assembly in a first direction along the length of the first pit, and moving the belt assembly in a second direction opposite from the first direction along the length of the second pit.

19. The method of claim 14 and further comprising holding the belt assembly completely above the material within the first pit, and moving the lower end of the belt assembly downward into contact with the material within the first pit.

20. A method for turning material piled on the ground in a windrow; the method comprising:

taking an apparatus comprising a first track assembly and a second track assembly spaced apart from one another and each having a continuous track trained around spaced apart forward and rear wheels, the track assemblies engaging the ground and being adapted to move in a forward direction on the ground toward the material piled on the ground; the apparatus further comprising a lift assembly positioned between and connected to the first and second track assemblies and comprising an upper end, a lower end, and a belt trained around the upper and lower ends, the lower end being positioned adjacent the ground and the upper end being positioned in spaced relation

above and rearwardly of the lower end whereby the belt includes an upwardly presented front belt surface extending upwardly from the lower end to the upper end, and a downwardly presented rear belt surface extending from the upper end to the lower end;

powering the first and second track assemblies independently of one another so as to steer the apparatus in a forward direction toward the windrow;

moving the upwardly presented front belt surface from the lower end of the lift assembly to the upper end of the lift assembly and the downwardly present rear belt surface from the upper end of the lift assembly to the lower end of the lift assembly;

steering the first and second track assemblies so that they straddle the windrow and the lower end of the lift assembly engages the windrow and causes the material in the windrow to be carried by the upwardly presented front belt surface to the upper end of the lift assembly;

dropping the material of the windrow from the top end of the lift assembly back onto the ground.

21. The method according to claim 20 and further comprising using a first group of vanes to deflect a first portion of the material being dropped from the top lift assembly in a first direction and using a second group of vanes to deflect a second portion of the material being dropped from the top end of the lift assembly in a second direction.

22. The method according to claim 20 and wherein the belt is trained around first and second rotating members, a tube assembly having a first tube member connected to the first rotating member and being telescopically mounted with respect to a second tube member

connected to the second rotating member; the method further comprising using a longitudinally extensible piston and cylinder located inside the first and second tube members to cause the first tube member to telescope and expand longitudinally with respect to the second tube member so as to increase the tension of the belt trained around the first and second rotating members.